

Newcomb-Toadlena Coal Field

Location

These coal fields are located within San Juan County, New Mexico, on the western margin of the San Juan Basin and entirely within the Navajo Indian Reservation. The location is best shown by Shomaker (1971, his fig. 17, p. 49).

Stratigraphy

Coal is present in the Menefee Formation. The geology of the Newcomb area was mapped and coal sections were measured by O'Sullivan (1955) and Beaumont and O'Sullivan (1955). Thickness measurements of the formations are not available for the following table.

Table. Stratigraphy—Newcomb-Toadlena coal field.

| Stratigraphic units | Depositional environment |
|-------------------------|----------------------------|
| Cliff House Sandstone | nearshore marine sandstone |
| Menefee Formation | coastal plain; coal |
| Point Lookout Sandstone | nearshore marine sandstone |

Coal Deposits

In the Toadlena area, the coals are less than 2.5 ft thick in beds dipping as much as 12 degrees, making them unsuitable for strip mining (Lease, 1971). In the Newcomb area, the coals have a maximum cumulative thickness in the range of 32–38 ft in 7 to 10 beds (Beaumont and O'Sullivan, 1955), with a maximum individual bed thickness of about 7 ft (Shomaker, 1971). The coals are generally lenticular and unevenly distributed in the stratigraphic section (Shomaker, 1971).

Coal Quality

The coal is subbituminous A or B rank and generally contains less than 1 percent sulfur (Shomaker, 1971). The table below is summarized from Shomaker (1971, table 3, p. 54).

Table. Coal in Menefee Formation.

[Values reported on an as-received basis]

| | Ash content (percent) | Sulfur content (percent) | Heating value (Btu/lb) |
|--------------------|--------------------------|-----------------------------|---------------------------|
| Range | 6.6-22.7 | 0.5-1.4 | 7,660-10,410 |
| Number of analyses | 6 | 6 | 6 |

Resources

No resource estimates are available for the Toadlena area. The Newcomb area contains resources of about 72 to 78 million short tons of surface-minable coal under less than 200 ft of overburden and another 54 million short tons under less than 1,000 ft of overburden that are potentially minable by underground methods (Shomaker, 1971; Hoffman, 1996).

Production History

No mining has taken place in either coal field.

References

- Beaumont, E.C., and O'Sullivan, R.B., 1955, Preliminary geologic map of the Kirtland quadrangle, San Juan County, New Mexico: U.S. Geological Survey Coal Investigations Map C-32.
- Hoffman, G.K., 1996, Coal resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources Resource Map 20, 22 p., 1 plate, scale 1:1,000,000.
- Lease, R.C., 1971, Toadlena Upper Menefee area, *in* Shomaker, J.W., Beaumont, E.C., and Kottlowksi, F.E., eds., Strippable Low-Sulfur Coal Resources of the San Juan Basin in New Mexico and Colorado: New Mexico Bureau of Mines and Mineral Resources Memoir 25, p. 47.
- O'Sullivan, R.B., 1955, Preliminary geologic map of the Naschitti quadrangle, San Juan County and McKinley Counties, New Mexico: U.S. Geological Survey Coal Investigations Map C-31.
- Shomaker, J.W., 1971, Newcomb Upper Menefee area, *in* Shomaker, J.W., Beaumont, E.C., and Kottlowksi, F.E., eds., Strippable Low-Sulfur Coal Resources of the San Juan Basin in New Mexico and Colorado: New Mexico Bureau of Mines and Mineral Resources Memoir 25, p. 47–52.